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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/263,918	03/05/1999	MARK L. SKARPNESS	042390.P6054	2384

7590 07/16/2002
KENT M. CHEN
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EXAMINER

HYUN, SOON D

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/263,918	SKARPNESS ET AL.	
	Examiner	Art Unit	
	Soon-Dong Hyun	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/10/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 1/10/2002 for a Continued Prosecution Application (CPA) under 37 CAR 1.53(d) based on parent Application No. 09/263,918 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Objections

2. Claim 4 is objected to because of the following informalities.

“a” before “central processing unit (CPU)” should be amended to -- the --.

“a” before “computer” should be amended to -- the --.

Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CAR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 4, 5, and 7-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak (U.S. Patent No. 6,262,995) in view of Nakaya (U.S. Patent No. 5,771,009).

Regarding claims 1 and 4, Kwak discloses a method comprising the steps of:

performing segmentation functions of SAR(segmentation and reassembly) functions for ATM (asynchronous transfer mode) with a software implemented in a CPU (50) of an ATM terminal (col. 2, lines 12-55, col. 3, line 47-col. 5, line 50 and FIG. 2) including,

receiving data to send (stored in a system memory 40);

segmenting the data to generate a plurality of ATM cells (col. 4, lines 43-62);

buffering the plurality of ATM cells in a memory device (30);

traffic shaping the buffered plurality of ATM cells (col. 5, lines 25-31); and

transmitting the plurality of ATM cells on a network (by a physical layer 10).

However, Kwak does not explicitly teach a software module implemented in the CPU.

Nakaya discloses a memory for program storage 104/204 (a software module) for

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coding/decoding using a general purpose CPU to substitute for a hardware chip to flexibly cope with changes in the functions and performance of the coding technique. See col. 1, lines 30-42 and FIG. 1 and 2. Those of skill in the art would have been motivated by Nakaya to incorporate a software module for SAR into Kwak to flexibly cope with changes in SAR functions of ATM. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate a SAR software module implemented in a CPU into Kwak.

Kwak does not explicitly teach that the ATM terminal is a personal computer, but Kwak teaches that the ATM terminal is a device that which performs telephone service using ATM. See col. 1, lines 19-20. It is well known in the art that a personal computer performs a multimedia communication including voice communications. Those of skill in the art would have been motivated to use a personal computer as the ATM terminal for multimedia communications. Therefore, it would have been obvious to one having ordinary skill in the art to use a personal computer as the ATM terminal of Kwak.

Regarding claim 5, refer to the discussion for the claim 1 above. Kwak+Nakaya discloses a program storage device (104 in FIG. 2 of Nakaya) readable by a machine, tangibly embodying a program of instructions executable by a machine to perform the method.

Nakaya further discloses that the program storage device has various code sections for performing the coding/decoding technique. Those of skill in the art would have been motivated by Nakaya to incorporate various code sections to perform corresponding SAR functions. See col. 3,

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lines 37-49 and claim 65. Therefore, it would have been obvious to one having ordinary skill in the art to incorporate various code sections into the software program.

Regarding claims 7 and 8, Kwak further discloses a CRC for detecting bit errors (col. 7, lines 54-56) and PAD (col. 7, lines 37-56).

Regarding claims 9-12, refer to the discussion for the claims 1 and 7. Kwak further discloses that reassembly is performed and a CS-PDU is constructed. See col. 8, lines 26-29 and FIG. 6d. A buffer (not shown) in a physical layer is equivalent to an input buffer in the claim and a double port RAM (30) is equivalent to a reassembly buffer in the claim.

Regarding claim 13, Kwak does not explicitly teach an end of payload data unit marker, but it is inherently required to construct a CS-PDU.

Regarding claims 14-16, refer to the discussion for the claims 5, 9, and 11.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Soon-Dong Hyun whose telephone number is (703) 305-4550. The examiner can normally be reached on Monday-Friday from 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen, can be reached on (703) 308-5340.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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7. Any response to this action should be mailed to:

Commissioner for Patents

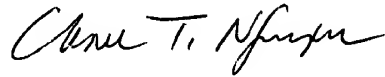
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Or faxed to: 703-872-9314 for formal communications intended for entry with a label of

“OFFICIAL” and for informal or draft communications with a label of “PROPOSED” or
“DRAFT” (attn: Art Unit 2663, Soon-Dong Hyun).


S. Hyun

7/10/2002



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
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